

REMARKS

Examiner is suggesting that various combinations of claims fall into three groups, I-III. The basis for this assertion lies in the sub-classification selected by the Examiner for the different groups.

With respect, the Examiner's categorisation of some claims is not supported by the features of those claims.

For example, Examiner has placed Group I in sub-classification 358/401. However, this sub-classification is concerned with converting an image into an electronic form then directly making a copy (ie, essentially a photocopying function). It is explicitly stated in the notes of that subclass that "an image is converted into an electrical signal and then converted into another image without transmission of the signal to a remote location". In contrast, it is very clear that the claims of Group I expressly require a request for a document to be sent to a computer system, and for the data necessary to reproduce that document to be forwarded to enable printing. There is no "conversion" of an image into an electric signal that is "converted into another image without transmission of the signal to a remote location". As described in more detail below, the document is not "scanned" for copying; rather, it is identified via coded data it includes then reproduced by supplying document data for printing based on that identification process.

Similarly, Examiner has placed the claims of Group II in subclass 358/453. This sub-class is concerned with selecting a portion of an image "for specific processing". This is not what is defined in these claims, which are concerned with using a sensing device to request reproduction of part of a document. It appears the Examiner seems to have interpreted these claims as being concerned with scanning a particular area of the document and reproducing it. Again, this is incorrect. As with the Group I claims, the document is not "scanned" for copying; rather, it is identified via coded data it includes then reproduced by supplying document data for printing based on that identification process.

Finally, Group III claims have been classified in sub-classification 382/131 and 382/132. Again, we disagree with this construction of the claims concerned. These sub-classes are concerned with Tomography ("generating or processing digitized images of one or more slices of a nominally solid object, generated by computer tomography (i.e., CT),

magnetic resonance (i.e., MR) or ultrasonically”) and X-Ray Film Analysis (“processing standard film or digitized X-ray images (e.g., bone fractures or mammography) such as for enhancement, segmentation, tone generation”). With respect, we are unable to ascertain how the examiner arrived at these classifications for the claims in Group III, which are concerned with the provision of a copy of part of a physical object. It is quite clear from the context of the claims involved, and of the specification as a whole, that the thing being reproduced is some or all of the document, although this reproduction could take place on an object similar to that on which the first document was located. The object could even be, for example, a sheet of paper, in which case the “document” can simply be interpreted as the information formed on the paper’s surface.

In any event, as with the claims of Group I and II, in the Group III claims the coded data is sensed by a sensing device, and used in the manner claimed to generate a copy request. We fail to see how this combination of claimed features led the Examiner to the sub-classifications directed to Tomography and X-Ray Film Analysis. If we have overlooked something in our interpretation of the classes, or if the Examiner believes there is something to do with Tomography or X-Ray analysis in the claims, we would appreciate it if the relevant sections were pointed out.

Examiner goes on to state that each of these inventions have separate utility. This is plainly incorrect, for the following reasons:

On page 3 of the office action, Group I is categorised as “scanning a regular two dimensional document”. Whilst this is not the language used in the claims, the general sense of interacting with a surface is correct. Whilst the sensing device might scan some or all of the surface to read coded data, we wonder whether the Examiner is suggesting with this language that the sensing device in fact scans an image that is reproduced. If this is what is suggested, the Examiner is in error. In any event, Group I is concerned with copying of “at least one page of a printed document”.

Examiner then contends that the claims of Group II are concerned with “Scanning only preselected data from a document, requiring image recognition or image portion selection for eliminating or selecting information for printing”, as required by the proposed

sub-classification. With respect, we fail entirely to see how this interpretation reads on the plain language used in the claims of Group II.

Examiner seems to believe that what is copied in the claims is based on how much of the original document is sensed; that there is some sort of image capture of the whole or part of a document, and that this image is then output in some way as a copy. With respect, this is not what is claimed in any claim, nor does it represent anything that would be understood from any reading of the specification, whether that reading be detailed or superficial.

In essence, the present invention is concerned with allowing a user to take a sensing device (such as the special pen described in the specification) and interact with a document to cause some or all of that document to be reproduced. This feature is defined in all of the claims.

The interaction that allows this reproduction to take place is based on the existence of coded data, which is also present in all the claims. Using this coded data, the sensing device generates indicating data indicative of an identity of the document. Again, this feature is defined in all of the claims (including those of Group III).

This indicating data is then forwarded to a computer system by the sensing device, in all claims. The computer system uses the indicating data to identify a request for a copy of at least some of the document, again, in all the claims: in the case of the Group I claims, this is for a copy of "at least one page of the document"; in Group II, the request is for a copy of "at least part of the document"; in Group III, the request is for "at least one part of the physical object". In every case, the request is for some or all of the document – whether the part is a page or some other fraction (Group I versus Group II) or whether thing to be copied is part of the document or of an object that by definition includes a document (Groups I & II versus Group III) is not relevant. It certainly does not place the various claims into different classifications, let alone the many unrelated sub-classifications determined by the Examiner.

Examiner also suggests in the first paragraph of page 4 of the Office Action that Group II is distinct from group I because "the entire document is not to be reproduced as is suggested in the first group". This is incorrect, for the reasons above. Group I defines "at least one page" of the document being reproduced; Group II defines "at least part" of the

document being reproduced. With respect, we are unable to see how these two features are so different as to require the claims they are defined in to be classified differently from each other.

Finally in relation to the grouping of the claims, Examiner suggests that Group III is about making a copy of a physical object. This is not what is claimed, and we are unsure how the examiner has come to this conclusion based on the language presented. What is claimed is making a copy of part of a physical object, that part including a document and coded data (see preamble to claim 87, for example). The coded data is sensed and the identity of the document thereby determined in the computer system. This is then used to generate a copy of the requisite part of the object, using the data indicative of the identity of the document.

In summary, we utterly reject the Examiner's suggestion that the various groups of claims are from different classifications. As outlined above, there is a solid core of common features that covers all claims presently on file, to the point where we strongly submit that the additional claims require no further searching or effort on the Examiner's part. For this reason, we submit that all claims should be grouped together, preferably within a single subclass, and that examination should proceed on this basis.

Turning to the Examiner's continuing rejection of the claims on Lemelson, we will again break down the claims into their constituent components and to show that they define novel and inventive features that are in no way anticipated by the citations.

By way of background, Lemelson is directed to an audio-visual system, typically for use in an educational context. Subject cards are inserted into a receptacle and then caused to move along a guide into an operating position where its printed face is viewable by a user. During this movement, coded information on a border of the subject card is scanned to capture audio-visual data related to the subject card. The arrangement is used to allow a user to interact in an audio-visual manner with, for example, a test or quiz.

The function of the present invention as claimed has already been described above, so all that will be discussed in detail here is the way in which the present claims are distinguished from the prior art.

To begin with, all of the present claims are directed to methods and systems for reproducing at least some of a document (including the case of an object that includes a document). Contrary to the Examiner's assertion on page 6 of the present office action, Lemelson does not disclose a method or system of reproducing a document. On this point, the Examiner refers to column 6, lines 5-10. However, the only printing function referred to in this context is the provision of a hard copy of "score answers or results". The "document", according to the Examiner's own interpretation of Lemelson, is the sheet 21 that is inserted into opening 14. Lemelson does not disclose reproduction of any part of the document 21; it only discloses printing of "a score, totalling of a score, answer to a question or a combination of such forms of information" (column 6, lines 11-13). For this reason alone, the present invention as claimed is distinguishable from Lemelson.

Each of the present independent claims also define interaction with a document that includes coded data indicative of an "identity of... the at least one reference point of the document". Examiner suggests that this feature is anticipated by the right margin of the document. This is an incorrect interpretation of the claim and of the citation. In the present independent claims, the coded data is indicative of a reference point of the document. In Lemelson, the right margin is not "coded data" because it is never interpreted or decoded or understood or even scanned in any meaningful way by the system disclosed. If the Examiner wishes to maintain this particular point, we would appreciate an explanation of how a "margin" can be considered "coded data", as well as how the margin so considered can be indicative of at least one reference point of a document. By this argument, even an edge of a piece of paper would be coded data, which is clearly an unsupportable proposition.

Each of the independent claims also defines the step of (or means for) receiving indicating data from a sensing device. This indicating data provides at least an identity of the document and the position of the sensing device with respect to the document. It is admitted that Lemelson discloses sensing of data from, for example, the magnetic strip 25 along one side of the card 21. However, this data is not indicative of the position of the sensing device with respect to the data. Nowhere in Lemelson is there disclosed a mechanism whereby the sensing device provides data that indicates the position of the sensing device relative to document, by using data sensed by the sensing device. Moreover, there would be no motivation for reading such an interpretation into Lemelson. The only

reason the magnetic strip 25 exists is to provide data to the processor 30 as the card 21 is fed into the apparatus 10. The physical position of data on the magnetic strip at any particular time is irrelevant. Moreover, there is no need to provide an indication of the relative position of the sensing device relative to the sensing device in Lemelson because the card can only fit in and be scanned in one orientation. The data encoded by the magnetic strip 25 includes only the information required to run the program associated with the card, not any indication of that data's position or a reference point on the card. On this basis alone, Lemelson fails to anticipate the invention as defined in the present claims.

The next feature claimed in each of the independent claims is one of the most important, and it is a feature upon which Lemelson is wholly silent. This feature is the generation of a request for a copy of at least part of the document. In Lemelson, the document, as admitted by the Examiner, is card 21. The only disclosure of printing in Lemelson is related to "score data". It can in no way be said that Lemelson uses the document identity and the position of the sensing device in relation to the document in order to generate a copy request for some or all of the document. Any printing out of scores or answers is done only in the context of user direction via the processor 30, not on the basis of generating a copy request based on indicating data indicative of a position of the sensing device relative to the document.

If the Examiner is not persuaded that Lemelson fails to disclose these features, we would appreciate it if the specific portions of Lemelson that show coded data being indicative both of the document's identity and a location of the sensing device being used to generate a document copy request could be pointed out specifically. We are unable to locate, in particular, any use of data indicative of a position of a sensing device relative to a document in generation of a copy request.

Turning to other claims, claim 2 (and 15) adds the feature of the request being associated with a zone of the document. Examiner contends that this feature is disclosed by the existence of a right margin of the card 21 "having information associated with the copy of a page and used to identify the zone where a sensing device is located". With respect, Figures 3 and 5 do not disclose any system or method in which a copy request of the type defined in claim 1 is associated with a zone of the document. Claim 2 further defines that the request, again as defined in claim 1, is identified from the zone relative to which the

sensing device is located. Again, there appears to be no such feature in Lemelson, since the sensing device is only ever "located" in the overall "zone" suggested by the examiner whilst the card 21 is being read. From that point onwards, all actions and procedures take place based on the user's interaction with the computer program, and not with the position of a sensing device with respect to the card. Let alone a zone of the card. There is certainly no disclosure in Lemelson of a copying request being associated with a zone of the document – again, if the Examiner wishes to maintain this objection, we respectfully request that the alleged disclosure of this feature in Lemelson be more explicitly pointed out, since it is absent from the particular passages mentioned to date. We would argue strongly that the Examiner's reference only to "figures 3 and 5" is entirely insufficient to enable us to ascertain which portions of those drawings are considered relevant by the Examiner.

Turning to claim 3, we would strongly submit that the "movement" mentioned by the Examiner in relation to Lemelson does not anticipate the movement feature defined in this claim. Claim 3 expressly requires that the sensing device capture "data regarding movement of the sensing device relative to the document", and then identifying the copy request from the movement data. Lemelson, by contrast, merely discloses reading data from a magnetic strip as a card is inserted into a slot. Whilst this relative movement between the card and the sensor allows data to be read from the magnetic strip, the data is not "data regarding movement"; rather, it is program data acquired as a result of the relative movement. Nothing in the data scanned by the sensor in Lemelson is indicative in any way of relative movement between the card and scanner. More to the point, the data so retrieved in Lemelson is not used as movement data to identify a copy request. Again, if the Examiner wishes to maintain this particular rejection, we would appreciate it if the specific way in which reading a magnetic strip for program data is considered to anticipate the plain claim language of using movement data in generation of a copy request could be set out explicitly.

Turning to claim 4, there is defined an aspect of the invention that incorporates the same features as claim 1, from a slightly different (but commercially important) viewpoint. The critical features of sensing coded data on a document to determine a copy request and then forwarding data to fulfil the copy request are the same. The difference here is that printing is explicitly claimed. We submit that claim 4 is patentable over Lemelson for the same reasons as submitted in relation to claim 1.

Similar comments apply to claim 5, which additionally requires that the sensing device generates data indicative of its movement relative to the document. Again, any movement in the Lemelson disclosure is to enable the program data to be extracted from the magnetic strip. It is this movement data that is interpreted as being a copy request. Lemelson does not use movement data in any way, since it does not disclose movement data per se.

The comments above can be applied to all of the claims in the present invention, and the fact that each and every claim is not argued for explicitly in this response should not be interpreted by the examiner as agreement in any way with the conclusion drawn so far.

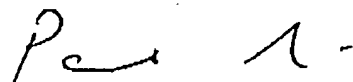
In view of the comments above, favourable reconsideration of all claims in the application is respectfully requested.

Very respectfully,

Applicant:



KIA SILVERBROOK



PAUL LAPSTUN

C/o: Silverbrook Research Pty Ltd
393 Darling Street
Balmain NSW 2041, Australia
Email: Kia.silverbrook@silverbrookresearch.com
Telephone: +612 9818 6633
Facsimile: +61 2 9818 6711

VERSION WITH MARKINGS TO SHOW CHANGES MADE**In the Claims:**

Claims 87 and 138 have been amended as follows:

87. (Amended) A method to enable a person to make a copy of at least one part of a physical object including a document and coded data, the coded data indicative of an identity of the document, the method including the steps of:

providing the person with the physical object;
receiving, in a computer system, data from a sensing device indicative of an identity of the person and indicative of the identity of the document, the sensing device containing the data indicative of the identity of the person and generating the data indicative of the identity of the document using at least some of the coded data; and
identifying, in the computer system and from the data indicative of the identity of the person and the identity of the document, a copy request, the copy request being a request for a copy of the at least one part of the physical object.

138. (Amended) A system to enable a person to make a copy of at least part of a physical object including a document and coded data, the coded data[,] being indicative of an identity of the document, the system including:

a computer system for receiving from a sensing device data indicative of an identity of the person and the identity of the document, and for identifying, from said received data, a copy request, the copy request being a request for the copy, the sensing device containing the data indicative of the identity of the person and sensing the data indicative of the identity of the document using at least some of the coded data.